

IN THE CLAIMS

Please amend the claims as follows. The present listing will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

- 1.(currently amended) An intercalation cathode material having the formula  $\text{Li}[\text{Li}_{(1-2x)/3}\text{M}_y\text{Mn}_{(2-x)/3}\text{Ni}_{(x-y)}]\text{O}_2$ , where  $0 < x < 0.5$ ,  $0 < y \leq 0.25$   $0.1 \leq x \leq 0.4$  and  $0 < y \leq 0.15$ ,  $x > y$ , and M is one or more divalent cations selected from Ca, Cu, Mg and Zn.
- 2.(canceled)
- 3.(canceled)
- 4.(currently amended) A cathode material according to Claim 31, wherein M is copper,  $0.15 \leq x \leq 0.35$ , and  $0.02 \leq y \leq 0.1$ .
- 5.(canceled)
- 6.(canceled)
- 7.(canceled)
- 8.(canceled)
- 9.(currently amended) A method for making an improved layered lithium manganese nickel oxide cathode material of the formula  $\text{Li}[\text{Li}_{(1-2x)/3}\text{M}_y\text{Mn}_{(2-x)/3}\text{Ni}_{(x-y)}]\text{O}_2$ , where  $0.1 \leq x \leq 0.4$  and  $0 < y \leq 0.15$ ,  $x > y$ , and M is one or more divalent cations selected from Ca, Cu, Mg and Zn, incorporating one or more of the divalent cations of Ca, Cu, Mg and Zn, comprising forming an intimate mixture in the correct proportions of the precursor salts, oxides or both of lithium, manganese, nickel and the incorporated element or elements one or more of the divalent cations of Ca, Cu, Mg and Zn, then subjecting the mixture one or more times to a temperature of about  $950^{\circ}\text{C}$  or greater or at least two

times to a temperature of less than 950<sup>0</sup>C, whereby a phase-pure layered lithium manganese nickel oxide is formed including the incorporated element or elements.

10.(original) A method according to claim 9, wherein the mixture of precursor salts or oxides is reacted in one heating step at a temperature between 950<sup>0</sup>C and 1050<sup>0</sup>C.